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### UNITED STATES PATENT AND TRADEMARK OFFICE

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## BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SAMSUNG DISPLAY CO., LTD

Appeal 2020-003494 Reexamination Control 96/000,213 Patent No. US 8,730,191 B2 Technology Center 3900

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Before JOHN A. JEFFERY, MARC S. HOFF, and ERIC B. CHEN, *Administrative Patent Judges*.

HOFF, Administrative Patent Judge.

#### **DECISION ON APPEAL**

#### STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from the rejection of claims 1–7 and 15–29. We have jurisdiction under 35 U.S.C. §§ 134(b) and 306.

We reverse.

The '191 patent issued to Kim on September 30, 2008. The '191 patent is a touch screen panel protected against failure due to static electricity. Kim includes a plurality of static electricity induction patterns extending between first and second sensing cells such that an end portion overlaps the neighboring sensing cell. Spec., Abstr.

<sup>&</sup>lt;sup>1</sup> Claims 8–14 have been cancelled. Claims 30 and 31 do not stand rejected.

Claim 1 is exemplary of the claims on appeal:

1. (Previously Presented) A touch screen panel, comprising:

a transparent substrate;

a plurality of first sensing cells connected along a first direction on the transparent substrate, and a plurality of second sensing cells disposed between the respective first sensing cells and connected along a second direction;

a plurality of first connection patterns which connect the first sensing cells along the first direction;

a plurality of second connection patterns which connect the second sensing cells along the second direction;

a plurality of static electricity induction patterns, each static electricity induction pattern being connected to one of the first sensing cells or one of the second sensing cells, and extending directly therefrom in a direction toward a sensing cell immediately adjacent to a sensing cell to which said each static electricity induction pattern is connected so that an end portion of the static electricity induction pattern overlaps the adjacent sensing cell; and

a first insulating layer interposed between the first and second connection patterns and between said each static electricity induction pattern and the adjacent sensing cell,

wherein an entirety of each of the static electricity induction patterns is spaced apart from any first imaginary line having a shortest distance between adjacent ones of the first sensing cells in the first direction and any second imaginary line having a shortest distance between adjacent ones of the second sensing cells in the second direction.

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Name	Reference	Date
LIN	CN 101655755 A	Feb. 24, 2010
Guo	CN 101840285 A	Sept. 22, 2010

Throughout this decision, we make reference to Appellant's Brief ("Appeal Br.," filed December 26, 2019), the Reply Brief ("Reply Br.," filed April 2, 2020) the Examiner's Answer ("Ans.," mailed February 13, 2020), and the Final Rejection ("Final Act.," mailed May 30, 2019) for their respective details.

#### REJECTIONS

Claims 1–7 and 15–27 stand rejected under 35 U.S.C. § 112(a), or 35 U.S.C. § 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. Final Act. 10.

Claims 1–7 and 15–27 stand rejected under 35 U.S.C. § 112(b), or 35 U.S.C. § 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant, regards as the invention. Final Act. 12.

Claims 1–5, 15–23, 26, and 27<sup>2</sup> stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lin. Ans. 6.

Claims 6, 7, 24, 25, 28, and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lin and Guo. Ans. 19.

<sup>&</sup>lt;sup>2</sup> Claims 28 and 29 are not included in the Examiner's statement of rejection, but are discussed in detail within the body of the rejection. Final Act. 28–38.

#### **ISSUE**

Appellant's arguments present us with the following issue:

Does Lin teach or suggest that

an entirety of each of the static electricity induction patterns is spaced apart from any first imaginary line having a shortest distance between adjacent ones of the first sensing cells in the first direction and any second imaginary line having a shortest distance between adjacent ones of the second sensing cells in the second direction?

## Principles of Law

Under the written description requirement of 35 U.S.C. § 112, the disclosure of the application relied upon must reasonably convey to one of ordinary skill in the art that, as of the filing date of the application, the inventor had possession of the later-claimed subject matter. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991). "One shows that one is 'in possession' of *the invention* by describing *the invention*, with all its claimed limitations, not that which makes it obvious." *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997).

The test for definiteness under 35 U.S.C. § 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986) (citations omitted). Claims must "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112, ¶ 2. However, "[o]nly claims not amenable to construction or insolubly ambiguous are indefinite. . . . A claim term is not indefinite just

because it poses a difficult issue of claim construction." *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1371 (Fed. Cir. 2008) (internal citations and quotation marks omitted). "Thus, the definiteness of claim terms depends on whether those terms can be given any reasonable meaning." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005).

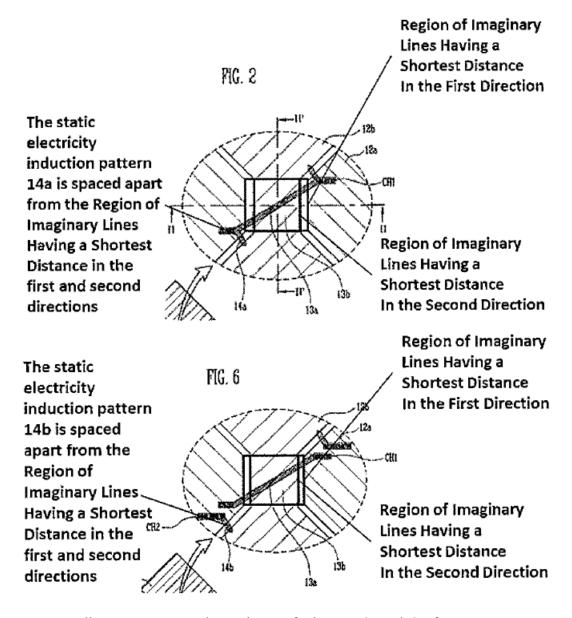
### **ANALYSIS**

Rejection under 35 U.S.C. § 112(a)

The Examiner determined that the originally-filed Specification and drawings does not provide support for the claimed static electricity induction patterns being "spaced apart from any first imaginary line having a shortest distance between adjacent ones of the first sensing cells in the first direction and any second imaginary line having a shortest distance between adjacent ones of the second sensing cells in the second direction." Final Act. 10.

We do not agree with the Examiner. While it is true that Appellant's drawings do not provide a figure that illustrates the claimed "imaginary lines," Appellant's drawing figures do illustrate first sensing cells 12a and second sensing cells 12b. During prosecution, Appellant provided an

illustration showing where the claimed "any first imaginary line" and "any second imaginary line" would lie. Amendment filed March 30, 2019, p. 12.



Applicant-Annotated versions of Figures 2 and 6 of U.S. Patent No. 8,730,191 B2, showing first imaginary lines having a shortest distance between adjacent ones of the first sensing cells 12a in the first direction, and

showing second imaginary lines having a shortest distance between adjacent ones of the second sensing cells 12b in the second direction.

It may be perceived from Appellant's annotated Figures that the static electricity induction patterns 14a, 14b (the "tails" of connection patterns 13a) are located entirely outside of ("spaced apart from," in the language of the claims) the imaginary rectangle defined by any first imaginary line having a shortest distance between adjacent ones of the first sensing cells, in a first direction, and defined by any second imaginary line having a shortest distance between adjacent ones of the second sensing cells 12b, in a second direction. Given the cells' particular geometry and arrangement in Figures 2 and 4–9, we agree with Appellant that these figures illustrate the claimed concept of "first imaginary lines" and "second imaginary lines," and locating the static electricity induction patterns 14a, 14b spaced apart from any such first and second imaginary lines. We further agree with Appellant, therefore, that the originally filed drawing figures show that the inventor possessed the claimed invention, including the limitation concerning the location of the static electricity induction patterns 14a, 14b.

We conclude that the Examiner erred in rejecting claims 1–7 and 15–27 under 35 U.S.C. § 112(a) as lacking written description support. We do not sustain the Examiner's rejection.

Rejection under 35 U.S.C. § 112(b)

The Examiner rejects the claims as being indefinite, relying on the same remarks made with respect to the § 112(a) rejection, and concludes that the claims are indefinite because the claim language regarding "any first

imaginary line" and "any second imaginary line" "does not provide a definite claim element with clear bounds."

We do not agree with the Examiner's conclusion. We find *supra* that Appellant's drawing figures illustrate the claimed first sensing cells and second sensing cells, and, given their particular geometry and arrangement in those figures, also illustrate "imaginary lines" having a shortest distance between adjacent ones of the sensing cells. We find, therefore, that one of ordinary skill in the art would understand what is claimed when the claims are read in light of the specification, of which the drawings form a part.

We conclude that the Examiner erred in concluding that claims 1–7 and 15–27 are indefinite under 35 U.S.C. § 112. We do not sustain the Examiner's rejection.

Rejection under 35 U.S.C. § 103 Claims 1–5, 15–23, 26, and 27

Independent claim 1 recites that "an entirety of each of the static electricity induction patterns is spaced apart from any first imaginary line having a shortest distance between adjacent ones of the first sensing cells in the first direction and any second imaginary line having a shortest distance between adjacent ones of the second sensing cells in the second direction." The Examiner finds that Figures 5D and 5E of Lin "make clear that there is a space between the cell in which the static electricity induction pattern leaves and the dielectric region [Fig. 5E, 140]." Advisory Action 3. "Here this space is in a vertical direction, but none the less (sic) spaced apart from other directions forming the critical region." *Id*.

We do not agree with the Examiner's finding. We agree with Appellant that an interpretation of "spaced apart" as being in the vertical direction is inconsistent with the Specification and drawings. Appeal Br. 9. We further agree with Appellant that every depiction in the Patent (i.e., Figures 2 and 4–9) shows the static electricity induction patterns outside the subject 'imaginary region' in both the claimed 'first direction' and the claimed 'second direction." *Id.* As discussed *supra*, we rely on the depictions in Figures 2 and 4–9 to supply written description support under 35 U.S.C. § 112, first paragraph, for the claimed spaced apart from a first imaginary line and a second imaginary line.

We further agree with Appellant that the Examiner's interpretation that "spaced apart" can refer to the vertical direction ignores the plain language of the claims, which require horizontal spacing corresponding to the "first direction" and the "second direction." Reply Br. 10. We agree with Appellant's argument that were a static electricity induction pattern to be only vertically spaced from the "imaginary region," the capacitance of the static electricity induction pattern 14a would necessarily be formed with the second connection pattern 13b, rather than with the corresponding sensing cell 12a, 12b. Reply Br. 10.

We determine that Lin does not teach or suggest all the limitations of representative claim 1. We do not sustain the Examiner's § 103 rejection of claims 1–5, 15–23, 26, and 27 over Lin.

## Claims 6, 7, 24, and 25

Each of these claims depends from independent claim 1, whose rejection over Lin we do not sustain. On this record, the Examiner does not find that Guo overcomes the deficiencies of Lin that we have noted. We do not sustain the Examiner's § 103 rejection of claims 6, 7, 24, and 25 over Lin and Guo, for the same reasons expressed *supra* with respect to the § 103 rejection of independent claim 1 over Lin alone.

### Claims 28 and 29

The Examiner finds that insulating layer 140 of Lin is entirely formed within the touch active area in which the first and second sensing cells are formed. Final Act. 36. We do not agree with the Examiner's finding, and we agree with Appellant's argument that Figures 3A and 3B of the '191 Patent show a first insulating layer 30 that covers an entirety of touch active area 101 while also covering a portion of the non-touch active area 102. Accordingly, Appellant's first insulating layer 30 is not formed only, or entirely, within the touch active area 101. Appeal Br. 16. We agree with Appellant that the Examiner's interpretation of "entirely formed on" as meaning "entirely formed within" is not supported by Appellant's Specification. *Id*.

We further agree with Appellant that Lin does not disclose a first insulating layer entirely formed on a touch active area in which the first and second sensing cells are formed. Appeal Br. 16. Lin teaches an "island type" dielectric layer defining holes therethrough. *Id*.

Because we find that the combination of Lin and Guo does not teach all the limitations of independent claim 28, and claim 29 dependent

therefrom, we do not sustain the Examiner's § 103 rejection of claims 28 and 29 over Lin and Guo.

### **CONCLUSION**

Lin does not teach or suggest that "an entirety of each of the static electricity induction patterns is spaced apart from any first imaginary line having a shortest distance between adjacent ones of the first sensing cells in the first direction and any second imaginary line having a shortest distance between adjacent ones of the second sensing cells in the second direction."

### **DECISION SUMMARY**

## In summary:

Claims	35 U.S.C.	Reference(s)/	Affirmed	Reversed
Rejected	§	Basis		
1–7, 15–27	112(a)	Written		1–7, 15–27
		description		
1–7, 15–27	112(b)	Indefiniteness		1-7, 15-27
1–5, 15–23,	103	Lin		1–5, 15–23,
26, 27				26, 27
6, 7, 24, 25,	103	Lin, Guo		6, 7, 24, 25,
28, 29				28, 29
Overall				1-7, 15-29
Outcome				

#### **ORDER**

The Examiner's decision to reject claims 1-7 and 15-29 is reversed.

# **REVERSED**

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